

Climate Prediction Center's Central Asia Hazards Outlook For USAID / FEWS-NET 14 – 20 September 2023

Temperature:

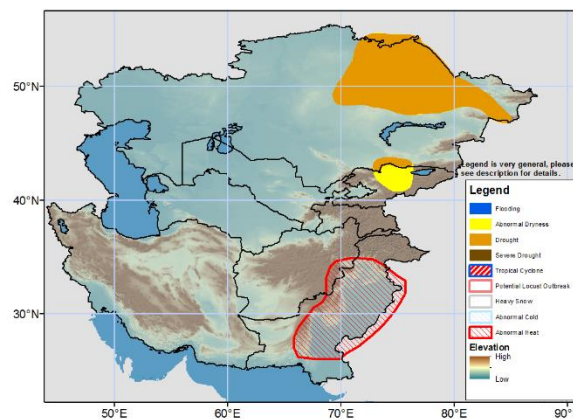
Weekly average maximum temperatures were below average (up to 2-6°C below normal) across primarily the western and central provinces of Kazakhstan, with the largest anomalies (4-6°C below normal) observed in the southern Kostanay, western Akmola, western Ulytau, eastern and southwestern Aktobe, northeastern Mangystau, southeastern Atyrau, and northwestern Karaganda regions during the period 05 September – 11 September 2023. Similarly, central and western Uzbekistan, northwestern Turkmenistan, and parts of central Kyrgyzstan experienced 2-4°C cooler than normal maximum temperatures during the week. Western and northern Afghanistan, most of Pakistan, and most of Iran observed maximum temperatures that were 2-6°C above normal. Some of the warmest maximum temperatures were observed in these regions: southwestern Afghanistan, central and southwestern Pakistan, and central and southeastern Iran observed mean maximum temperatures above 40°C. In addition, parts of southwestern Iran observed mean maximum temperatures above 45°C. The highlands of Kyrgyzstan, Tajikistan, eastern Kazakhstan, most of northern Pakistan, and central and northeastern Afghanistan recorded mean minimum temperatures between 0-5°C.

During the next week, the GEFS model predicts cooler than average maximum temperatures (-6 to -1°C) primarily from the western Ulytau and Turkistan to the West Kazakhstan, Atyrau, and Mangystau regions of Kazakhstan and southward to include much of central and western Uzbekistan, central and western Turkmenistan, northern Iran, and western Afghanistan. Temperatures are predicted to be 15°C and higher in Kazakhstan (outside of the higher elevations of eastern Kazakhstan) and between 25-35°C in central and eastern portions of Uzbekistan and Turkmenistan. In contrast, maximum temperature anomalies are expected to be 2-4°C warmer than average in far northern Kazakhstan, central and eastern Afghanistan, northern and central Tajikistan, northern and central Pakistan, southeastern Iran, and southern and central Kyrgyzstan. Anomalies are expected to be larger (4-8°C above normal) in eastern Tajikistan, northeastern Afghanistan, the North Kazakhstan region of Kazakhstan, and northern Pakistan. In these regions, maximum temperatures are expected to be between 0-15°C in southern Kyrgyzstan and eastern Tajikistan, above 35°C in southwestern Afghanistan and western Pakistan, and above 40°C in southern Iran and central and eastern Pakistan. An abnormal heat polygon has been placed across eastern Afghanistan and central Pakistan.

Precipitation:

Moderate to heavy precipitation was observed over northern and southwestern Kazakhstan and parts of northern Pakistan, and light precipitation fell over parts of eastern and central Kazakhstan and northwestern and eastern Kyrgyzstan. Some locations in the northwestern Kostanay, central Akmola, eastern Aktobe, northern East Kazakhstan, and northern Mangystau regions of Kazakhstan, as well as an area near Islamabad and Gujrat in Pakistan, received 25-50mm, which was 10-50mm above average for the week. Eastern and central Kazakhstan, as well as parts of eastern and northwestern Kyrgyzstan received moderate rainfall (10-25mm). The 30-day precipitation follows similar spatial patterns to the weekly totals, with accumulations of 25 to more than 100 mm covering northwestern and eastern Kyrgyzstan as well as northern, central, and some southern regions of Kazakhstan. Deficits between 10-50 mm cover the region of West Kazakhstan (equating to less than 50% of normal), eastern Afghanistan, central Kyrgyzstan, and central and eastern Pakistan. Over the 90-day period, deficits have been large (25-100 mm) in the western Pavlodar, eastern Akmola, and eastern North Kazakhstan regions of Kazakhstan, a small area including Kabul in Afghanistan, and especially over central Kyrgyzstan, which received less than 25% of normal precipitation.

During the coming week, the GEFS model predicts 10-50mm precipitation in northwestern, northeastern, and southeastern Kazakhstan, which will result in wetter than normal conditions by up to 20mm, with higher elevations in the east likely receiving moderate accumulations of snowfall. Far eastern Kyrgyzstan could also receive up to 50mm of precipitation, with decreasing accumulations to the west. Light to moderate precipitation is expected across much of the northern mountains of Pakistan (primarily up to 25 mm) and eastern Afghanistan, equating to near- to slightly below-normal conditions.



Note: The Hazards outlook map is based on current weather/climate information, short and medium range weather forecasts (up to 1 week), sub-seasonal forecasts up to 4 weeks, and assesses the potential impact of extreme events on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed and predicted to continue during the outlook period. The boundaries of these polygons are only approximate at the spatial scale of the map. This product takes into account long range seasonal climate forecasts but does not reflect current or projected food security conditions. FEWS NET is a USAID-funded activity whose purpose is to provide objective information about food security conditions. Its views are not necessarily reflective of those of USAID or the U.S. Government. The FEWS NET weather hazards outlook process and products include participation by FEWS NET field and home offices, NOAA-CPC, USGS, USDA, NASA, and a number of other national and regional organizations in the countries concerned. Questions or comments about this product may be directed to Dr. Wassila Thiaw, Head, International Desks/NOAA, wassila.thiaw@noaa.gov. Questions about the USAID FEWS NET activity may be directed to Dr. James Verdin, Program Manager, FEWS NET/USAID, jverdin@usaid.gov.